

DISPLAYS

TECHNOLOGY AND APPLICATIONS

Index to Volume 17

No 1 pp 1-60
No 2 pp 61-122

Nos 3-4 pp 123-233

Article index

Number 1

- Spatial and temporal frequency in animated mimic displays
K. B. Bennett, A. L. Nagy 1
- Modeling of facial expression and emotion for human communication system
S. Morishima 15
- A perceptual error measure for sampled and interpolated complex colour images
M. R. M. Nijenhuis and F. J. J. Blommaert 27
- Assessing the perceived structure of flight simulator visual scenes using multidimensional scaling
J. A. Kleiss 37

Number 2

- The performance and workload effects of task re-location during automation
P. A. Hancock and S. F. Scallen 61
- Visual processing of depth information in stereoscopic displays
R. Patterson 69
- Overcoming human factors deficiencies of videocommunications systems by means of advanced image technologies
A. Suwita, M. Böcker, L. Mühlbach, D. Runde 75
- Measures of graphical complexity for navigation and route guidance displays
J. L. Evans and A. Stevens 89
- The optimal glass transmission coefficient as a function of the level of diffuse ambient illumination
K. Teunissen, R. Hamberg and J.-B. Martens 94
- 3-D displays: A review of current technologies
S. Pastoor and M. Wöpking 100
- Vision screeners for display screen equipment users:
J. Zhang 217

An experimental evaluation

T. J. Horberry, A. G. Gale and S. P. Taylor 111

Numbers 3-4

- The next generation of graphical user interfaces: information visualization and better window management
B. Schneiderman 125
- True multimedia presentations: A case study
K. Adamson, C. Hannigan, J. R. Ware, L. C. Manley and W. J. Hanna 131
- User expectations for the intelligent blackboard
M. Graña, A. D’Anjou, F. J. Torrealdea 143
- Telelearning in the virtual lecture theatre
F. Bodendorf, R. Grebner and C. Langenbach 147
- Opening up horizons: Providing on-line course material in cyberspace
T. Wilson and D. Whitelock 153
- Student-teacher communication directed to computer-based learning environments
R. Marin, P. J. Sanz, O. Coltell, J. M. Iñesta, F. Barber and D. Corella 167
- Using non-speech sound to overcome information overload
S. A. Brewster 179
- Cubby: a multiscreen movement parallax display for direct manual manipulation
J. P. Djajadiningrat, G. J. F. Smets and C. J. Overbeeke 191
- Head-mounted display for supervisory control in autonomous production cells
C. Schlick, R. Daude, H. Luczak, M. Weck and J. Springer 199
- Bringing wireless video into networked multimedia systems
E. D. S. Moreira, W. S. Encinas and A. C. B. Ramos 207
- The expressive task specification and adaptive image data handling for mobile applications
J. Zhang 217

Author index

Adamson, K. 131

Barber, F. 167
Bennett, K. B. 1
Blommaert, F. J. J. 27
Bodendorf, F. 147
Böcker, M. 75
Brewster, S. A. 179

Coltell, O. 167
Corella, D. 167

D’Anjou, A. 143
Daude, R. 199
Djajadiningrat, J. P. 191

Encinas, W. S. 207
Evans, J. L. 89

Gale, A. G. 111
Graña, M. 143
Grebner, R. 147

Hamberg, R. 94
Hancock, P. A. 61
Hanna, W. J. 131
Hannigan, C. 131
Horberry, T. J. 111

Iñesta, J. M. 167

Kleiss, J. A. 37

Langenbach, C. 147
Luczak, H. 199

Manley, L. C. 131
Martens, J.-B. 94
Marin, R. 167
Moreira, E. D. S. 207
Morishima, S. 15
Mühlbach, L. 75

Nagy, A. L. 1
Nijenhuis, M. R. M. 27

Overbeeke, C. J. 191

Pastoor, S. 100

Patterson, R. 69

Ramos, A. C. B. 207

Runde, D. 75

Sanz, P. J. 167

Scallen, S. F. 61

Schlick, C. 199

Shneiderman, B. 125

Smets, G. J. F. 191

Springer, J. 199

Stevens A. 89

Suwita, A. 75

Taylor, S. P. 111

Teunissen, K. 94

Torrealdea, F. J. 143

Ware, J. R. 131

Weak, M. 199

Whitelock, D. 153

Wilson, T. 153

Wöpkling, M. 100

Zhang, J. 217

Keyword index

3-D displays

Stereoscopy, Spatial vision 100

Adaptive automation

Display layout, Proximity Compatibility Principle (PCP) 61

Ambient illumination

Optical glass transmission coefficient, Image quality factors 94

Apparent motion

Temporal frequency, Spatial frequency 1

Auditory interfaces

Sonically enhanced widgets, Sonification, Buttons, Scrollbars 179

Binocular disparity

Stereopsis, Depth constancy, Stereoscopic displays 69

Broadband network

Telelearning, Teleteaching, Multimedia teleteaching environment, Virtual lecture theatre, Video and graphics displays 147

Buttons

Sonically enhanced widgets, Auditory interfaces, Sonification, Scrollbars 179

Computer-based learning environment

Multimedia educational applications, Human-computer interface 167

Computer-generated imagery

Flight simulation, Low-level flight, Multidimensional scaling, Self-motion perception 37

Conferencing

World Wide Web (WWW), On-line resources 153

Depth constancy

Stereopsis, Binocular disparity, Stereoscopic displays 69

Desktop virtual reality

Movement parallax, Multiscreen, Manipulation 191

Digital video

Networked multimedia, Wireless communication 207

Display complexity

Graphical complexity, In-vehicle information systems 89

Display layout

Adaptive automation, Proximity Compatibility Principle (PCP) 61

DSE users

Vision screening, Optometric 111

Emotion model

Face model, Range data, Neural network, Nonverbal communication, FACS 15

End-user applications

Systems integration, True multimedia, Open architecture, 131

Eye-contact

Human factors, Videocommunications, Telepresence, Stereoscopy 75

Face model

Range data, Emotion model, Neural network, Nonverbal communication, FACS 15

FACS

Face model, Range data, Emotion model, Neural network, Nonverbal communication 15

Flight simulation

Low-level flight, Multidimensional scaling, Self-motion perception, Computer-generated imagery 37

Graphical complexity

Display complexity, In-vehicle information systems 89

Hand-surface interaction

Handwritten information, Very large displays 143

Handwritten information

Hand-surface interaction, Very large displays 143

Human factors

Videocommunications, Telepresence, Stereoscopy, Eye-contact 75

Human-computer interface

Multimedia educational applications, Computer-based learning environment 167

Human-machine systems

Multimedia, Human-centred design, Tasks, Machine tools 199

Human-centred design

Human-machine systems, Multimedia, Tasks, Machine tools 199

Image quality factors

Optical glass transmission coefficient, Ambient illumination 94

In-vehicle information systems

Graphical complexity, Display complexity 89

Interpolation

Perceptual image quality, Sampling 27

Low-level flight

Multidimensional scaling, Self-motion perception, Computer-generated imagery, Flight simulation 37

Machine tools

Human-machine systems, Multimedia, Human-centred design, Tasks 199

Manipulation

Movement parallax, Multiscreen, Desktop virtual reality 191

Mobile environment

Task specification, Multimedia data handling, Wavelet transformation 217

Movement parallax

Multiscreen, Desktop virtual reality, Manipulation 191

Multidimensional scaling

Self-motion perception, Computer-generated imagery, Flight simulation, Low-level flight 37

Multimedia data handling

Mobile environment, Task specification, Wavelet transformation 217

Multimedia educational applications

Human-computer interface, Computer-based learning environment 167

Multimedia teleteaching environment

Telelearning, Teleteaching, Virtual lecture theatre, Broadband network, Video and graphics displays 147

Multimedia

Human-machine systems, Human-centred design, Tasks, Machine tools 199

Multiscreen

Movement parallax, Desktop virtual reality, Manipulation 191

Networked multimedia

Wireless communication, Digital video 207

Neural network

Face model, Range data, Emotion model, Nonverbal communication, FACS 15

Nonverbal communication

Face model, Range data, Emotion model Neural network, FACS 15

On-line resources

World Wide Web (WWW), Conferencing 153

Open architecture

Systems integration, True multimedia, End-user applications 131

Optical glass transmission coefficient

Ambient illumination, Image quality factors 94

Optometric

Vision screening, DSE users, 111

Perceptual image quality

Quality, Sampling, Interpolation 27

Proximity Compatibility Principle (PCP)

Display layout, Adaptive automation 61

Range data

Face model, Emotion model, Neural network, Nonverbal communication, FACS 15

Sampling

Interpolation, Perceptual image quality 27

Scrollbars

Sonically enhanced widgets, Auditory interfaces, Sonification, Buttons 179

Self-motion perception

Computer-generated imagery, Flight simulation, Low-level flight, Multidimensional scaling 37

Sonically enhanced widgets

Auditory interfaces, Sonification, Buttons, Scrollbars 179

Sonification

Sonically enhanced widgets, Auditory interfaces, Buttons, Scrollbars 179

Spatial frequency

Apparent motion, Temporal frequency 1

Spatial vision

3-D displays, Stereoscopy, 100

Stereopsis

Depth constancy, Binocular disparity, Stereoscopic displays 69

Stereoscopic displays

Stereopsis, Depth constancy, Binocular disparity 69

Stereoscopy

3-D displays, Spatial vision 100

Stereoscopy

Human factors, Videocommunications, Telepresence, Eye-contact 75

Systems integration

True multimedia, Open architecture, End-user applications 131

Task specification

Mobile environment, Multimedia data handling, Wavelet transformation 217

Tasks

Human-machine systems, Multimedia, Human-centred design, Machine tools 199

Telelearning

Teleteaching, Multimedia teleteaching environment, Virtual lecture theatre, Broadband network, Video and graphics displays 147

Telepresence

Human factors, Videocommunications, Stereoscopy, Eye-contact 75

Teleteaching

Teleteaching, Multimedia teleteaching environment, Virtual lecture theatre, Broadband network, Video and graphics displays 147

Temporal frequency

Spatial frequency, Apparent motion 1

True multimedia

Systems integration, Open architecture, End-user applications 131

Very large displays

Hand-surface interaction, Handwritten information 143

Video and graphics displays

Telelearning, Teleteaching, Multimedia teleteaching environment, Virtual lecture theatre, Broadband network 147

Videocommunications

Human factors, Telepresence, Stereoscopy, Eye-contact 75

Virtual lecture theatre

Telelearning, Teleteaching, Multimedia teleteaching environment, Broadband network, Video and graphics displays 147

Vision screening

DSE users, Optometric 111

Wavelet transformation

Mobile environment, Task specification, Multimedia data handling, 217

Wireless communication

Networked multimedia, Digital video 207

World Wide Web (WWW)

Conferencing, On-line resources 153

Calendar 55, 119**Editorial** 123



